

75. (Amended) An image pickup apparatus comprising:

a light modulation apparatus including a liquid crystal device, a drive pulse generation unit for driving said liquid crystal device, and a pulse width control unit for modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein said light modulation apparatus is disposed in an optical path of an optical system of said image pickup apparatus; and

wherein an average per unit time of positive and negative pulse heights of drive pulses applied between drive electrodes of said liquid crystal device upon modulation of the pulse width of each drive pulse is preferably nearly zero.

76. (Amended) An image pickup apparatus comprising:

a light modulation apparatus including a liquid crystal device, a drive pulse generation unit for driving said liquid crystal device, and a pulse width control unit for modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein said light modulation apparatus is disposed in an optical path of an optical system of said image pickup apparatus; and

wherein the modulation of the pulse width of each drive pulse is performed in such a manner that the waveform of each drive pulse is present in a period of a basic frequency.

80. (Amended) An image pickup apparatus comprising:

a light modulation apparatus including a liquid crystal device, a drive pulse generation unit for driving said liquid crystal device, and a pulse width control unit for modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein said light modulation apparatus is disposed in an optical path of an optical system of said image pickup apparatus; and

wherein said liquid crystal device is a guest-host type liquid crystal device.

83. (Amended) An image pickup apparatus comprising:

c4 a light modulation apparatus including a liquid crystal device, a drive pulse generation unit for driving said liquid crystal device, and a pulse width control unit for modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device; and

a polarizing plate disposed in an optical path of light made incident on said liquid crystal device;

wherein said light modulation apparatus is disposed in an optical path of an optical system of said image pickup apparatus.

86. (Amended) An image pickup apparatus comprising:

5 a light modulation apparatus including a liquid crystal device, a drive pulse generation unit for driving said liquid crystal device, and a pulse width control unit for modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein said light modulation apparatus is disposed in an optical path of an optical system of said image pickup apparatus; and

wherein a drive electrode of said liquid crystal device is formed at least over the entire region of an effective light transmission portion.

115. (Amended) A method of driving a light modulation apparatus according to claim 111, wherein the basic frequency and the modulated pulse width adjusted in such a manner as to prevent the occurrence of flicker in stationary drive of said light modulation apparatus.

150. (Amended) A method of driving an image pickup apparatus in which a liquid crystal device is disposed in an optical path of an optical system of said image pickup apparatus, comprising the step of:

modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein the pulse width of each drive pulse is modulated with its pulse height kept constant.

151. (Amended) A method of driving an image pickup apparatus in which a liquid crystal device is disposed in an optical path of an optical system of said image pickup apparatus, comprising the step of:

C-7
cont. modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein an average per unit time of positive and negative pulse heights of drive pulses applied between drive electrodes of said liquid crystal device upon modulation of the pulse width of each drive pulse is preferably nearly zero.

152. (Amended) A method of driving an image pickup apparatus in which a liquid crystal device is disposed in an optical path of an optical system of said image pickup apparatus, comprising the step of:

modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein the modulation of the pulse width of each drive pulse is performed in such a manner that the waveform of each drive pulse is present in a period of a basic frequency.

155. (Amended) A method of driving an image pickup apparatus in which a liquid crystal device is disposed in an optical path of an optical system of said image pickup apparatus, comprising the step of:

modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein luminance information of the light emerged from said liquid crystal device is fed back to a control circuit unit provided in said light modulation apparatus, and the pulse width of each drive pulse is modulated in synchronization with a clock generated by said drive circuit unit on the basis of a control signal supplied from said control circuit unit.

156. (Amended) A method of driving an image pickup apparatus in which a liquid crystal device is disposed in an optical path of an optical system of said image pickup apparatus, comprising the step of:

modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein said liquid crystal device is a guest-host type liquid crystal device.

159. (Amended) A method of driving an image pickup apparatus in which a liquid crystal device is disposed in an optical path of an optical system of said image pickup apparatus, comprising the step of:

modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein a polarizing plate is disposed in an optical path of light made incident on said liquid crystal device.

162. (Amended) A method of driving an image pickup apparatus in which a liquid crystal device is disposed in an optical path of an optical system of said image pickup apparatus, comprising the step of:

modulating a pulse width of each drive pulse to be applied to said liquid crystal device, thereby controlling a transmittance of light made incident on said liquid crystal device;

wherein a drive electrode of said liquid crystal device is formed at least over the entire region of an effective light transmission portion.

Please cancel claims 73 and 149.